# BILLINGS BLM FIRE



2008

# **BILLINGS BLM ZONE DESCRIPTION**

#### **PROTECTION**

The Billings Fire Zone has two fire stations, one each in Billings and Bridger. Each station has one Type VI engine with a crew of six personnel. Direct suppression response areas include approximately 430,000 acres of BLM land located in the surrounding 7 county areas and the Pryor Mountains of the Custer National Forest located south of Billings. Most of these acres are inter-mixed with private land. Due to this, many private fires will threaten BLM land and BLM will assist the counties and the Montana DNRC. A complexity analysis is required to be completed prior to engagement on fires in the Billings Fire Zone. The on-line fire report must be completed within five days of the fire being called out.

Each county in the zone has a number of city and rural volunteer fire departments as well as county personnel and equipment. Due to the mixed ownership of lands, BLM works closely with the BIA Crow Agency, National Park Service (Bighorn Canyon), Gallatin National Forest (Big Timber Ranger District), Custer National Forest (Beartooth Ranger District) and the Lewis & Clark National Forest (Judith and Musselshell Ranger Districts), Montana Department of Natural Resources & County VFD's.

#### STRATEGY AND TACTICS

There are a variety of fuel types, moisture conditions and varying terrain which includes river bottoms, rolling low lands and mountainous terrain with elevations up to 9200 feet. Fuel types include models 1, 2, 6, 8, 9 & 10. Mobile attack and progressive hose lays are a common method of firefighting tactics throughout the zone.

#### **PROBLEMS AND HAZARDS**

Distances to fires can be long and response times slow due to the size of the zone, allowing some fires to grow in size. Expect county and volunteer forces to be on scene or en-route along with BLM in most areas except for the Pryor Mountains. With the number of volunteer forces, communications may become a problem; however communications can usually be established using provided mutual aid frequencies. Wildland Urban Interface (WUI) occurs throughout the zone. WUI subdivisions exist as far out as 60 miles from the Billings fire station. General hazards or concerns of the zone include heavy traffic in urban areas, snags, flashy & light fuels, multiple jurisdiction fire incidents, mine shafts, and other common hazards associated with wildland firefighting. Due to being in a drought the last 8 years, fuels, especially heavier types, are extremely dry and are prone to extreme fire behavior during unexpected times.

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"When in doubt, burn er out"

"Go hard, or Go Home"

"Lead, Follow, or get out of the Way"

# S.O.P.'S FOR FIRE SUPPRESSION

- The fire orders are our rules for engagement.
- The Watchout Situations are one tool to maintain situational awareness.
- All LCES factors will be mitigated.
- All firefighters will wear appropriate PPE on the Fireline.
- All firefighters will receive a briefing prior to assignment.
- Trigger points will be defined, established and used.
- All firefighters are responsible for mindfulness, situational awareness, and providing for the safety of the team and themselves.
- All firefighters will speak out when possessing questions or concerns regarding the situation.
- AN AAR will follow each assignment facilitated by the crew leader
- Each module should be self sufficient for a minimum of 48 hours.
- All traffic laws will be adhered to. The use of lights and sirens is not authorized during response to fires.
- Communications need to go through Billings Dispatch.
- All resource/supply orders go through Billings Dispatch.
- Do what is reasonably necessary to gain access to a fire (access through private land, cut fences), document what you do.
- DO not hesitate to make the call to transition a fire if it is beyond your capabilities as an IC. Realize help may not be available immediately. Do what you know to be right in the meantime: take actions that are safe, those that have the highest probability for success given your situation.

#### MINIMUM SUPPRESSION STANDARDS

- A Fireline at least one foot in width, down to mineral soil, will be constructed around the fire
  perimeter. Additions to line construction will depend on cover, slope, fire
  behavior and what is required to do.
- All trees will be limbed as high as possible, with safety being adhered to, and small trees should be removed within and along the Fireline.
- Leave no unburned material inside the final Fireline.
- Mopping up the entire Fireline area is required unless not practical, due to size.
- All snags and lightning struck trees will be felled, all other timber will be carefully checked and felled if necessary.
- Logs within the Fireline will be bucked up, rolled out of their beds and dug up completely.
- Cold trail the fire entirely.
- Spot fires will be flagged.
- The fire may be abandoned 6 daylight hours after the last smoke and successful cold trailing. Do not call out unless positive.
- Garbage will be carried or packed out.
- If relieved, record time of transition, and the name of the incoming IC for your fire report.

# INTERAGENCY INITIAL ATTACK

As stated in the zone description, dispatch and it's initial attack resources work closely as interagency partners in a cooperative suppression role, with the USFS, the State of Montana DNRC, and local governments.

- The BLM has a 24 hour reciprocal use agreement amongst the counties within the zone that provides for a "no cost" suppression agreement excluding the use of aircraft. Standard operating procedures for responding to a mutual aid dispatch are as follows:
- 1. A request for mutual aid can be submitted via the individual County Dispatch, DES Coordinator, VFD or RFD through Billings Dispatch.
- 2. Responding resources work directly for the requesting County IC. If BLM land is threatened or involved, a unified command with the County IC must be established. BLM accepts the local standards for equipment and personnel on these fires and we do not "turn away" resources on scene. These resources are under the command of the local departments.
- BLM resources provide suppression support until either the fire is controlled and they are released, the 24 hour agreement is up, or there is another fire priority and BLM resources are reassigned by dispatch.
- During periods of high fire occurrence, the DNRC and BLM may collaborate to form an initial attack response group consisting of various task force and strike teams. These groups will be controlled in an ICS organization utilizing command, planning, and logistics with a developed Incident Action Plan (IAP). All resources will be under the direction of a unified command between the BLM and DNRC Duty Officers, and be dispatched by Billings Dispatch Center. Participating IA resources need to be aware of the following:
- Resources dispatched must adhere to the suppression regulations dictated by incident ownership (BLM fires may involve Wilderness Study Areas/WSA's, or Areas of Critical Environmental Concern/ ACEC's which may limit tactical response with heavy equipment).
- Requests by counties for suppression assists are under DNRC agreements which follow similar formats as the BLM reciprocal agreements described above.
- Private land response requires consultation with landowners to determine values at risk, as well as unified command with the local VFD/ RFD.

# **DUTY OFFICER**

# Roles & Responsibilities

- Qualified as ICT3 or Single Resource Boss (TFLD, STEN)
- Have Delegated Authority from Zone FMO
- Notify dispatch of resource status daily.
- Coordinate Initial Attack activities with dispatch and local cooperators.
- Monitor work/ rest guidelines of all resources.
- Keep FMO and Line Officer aware of all activity within the zone.
- Make sure all supporting fire incident documentation is completed and processed (fire reports, crew time, etc.)
- Maintains availability via phone with dispatch after hours.
- Ensure all personnel are accounted for at the end of each day.

# **Duty Officer Limitations**

- Approving personnel actions.
- Managing fires beyond experience level and qualifications.
- Making resources available off zone.

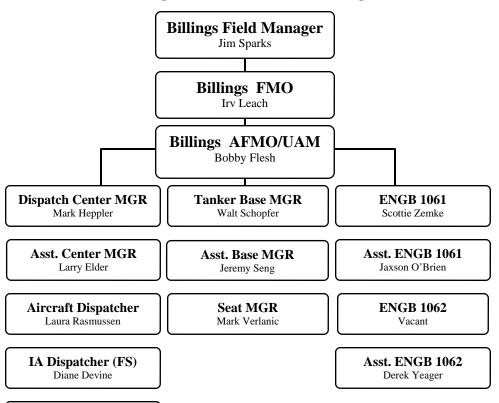
# FIRE CREW DAILY SCHEDULE

- 0930-1000 Engine Checks
- 1000-1030 Daily Resource Briefing
- 1030-1145 Physical Training
- 1145 All Fire Personnel ready for the day & or assignments
- 1145-1730 Patrol, Project Work, Standby & 1/2 hour Lunch
- 1730-1800 Clean up for day, Readied for following day, Close Shop

#### **FIRE CREW DAILY DUTIES**

- Complete morning vehicle checks and update vehicle logs & reports
- Actively participate in morning briefing & Six Minutes for Safety
- Participate and develop personal P.T. program and maintain through summer
- Make sure all firefighting gear in accounted for and equipment is ready
- Station is clean at all times and help out where help is needed
- Maintain communications with dispatch throughout the day of status & location
- Engines are furbished and maintained at all times throughout the day & summer

# 2008 Billings BLM Fire Table of Organization



IA Dispatcher (BIA)

Vacant

Logistics Coordinator
Ann Vogt

	SUMMARY OF ACTIONS (ICS 214)
Date/Time	Major Events (Documentation)

	INITI	AL ATTAC	K FIRE SI	ZE-UP		
Fire Name			Fire Code	DOI:		
IC Name:			Number:	State:		
Date/Time:				Private:		
Legal:	Township:		Range:		Sec:	
Coordinates:		Lat:		Long:		
Note: Use NAD 83 i	n your GPS and use	Degrees, Minutes Sec	onds	l		
Reported By	<b>:</b>	Е	stimated Size	e:		
Fire Investig	ator: Yes:	No:	Name:			
Est. Contain	ment:		Est. Contro	1:		
		Initial Fir	e Size-Up			
Any Structur	res Threatene	d? N	o: Y	Yes: Specify		
Any Control	Problems?	If Yes: Speci	fy			
Additional Resources Needed?			No:	Yes: Specify	,	
Hazard(s):						
Spread Poter	ntial:	1. Low	2. Moderate	3: High	4. Extreme	
Character of	f Fire	1.Smoldering	2.Creeping	3.Running	4.Spotting	
		5.Torching	6.Crowning	7.Erratic		
Slope at He	ad of Fire:	1. 0-25%	2. 26-40%	3. 41-55%	4. 55% +	
Position on S	Slope:	Ridgetop	Upper 1/3 on Slope V		Valley	
Sa		Saddle	Middle 1/3 on Slope		Mesa	
Canyon			Lower 1/3 o	on Slope Flat		
		1. Grass	4. Juniper	7. Aspen	Aspen	
Fuel Type		2. Brush	5. Pine(s)	8. Logging S	Slash	
		3. Oak	6. Fir	9. Other:		
Wind speed:			Wind Direction	n:		
Todav's ERC o	r BI Unit:					

Commen					Resource I.D.
ts/Docun					Resource Type
Comments/Documentation:					ETA or O.S.
					No. of Personnel
					Assignment
					Start of Shift
					End of Shift
					Total Hours Worked
					Rest Time Needed
					Comments

RESOURCE SUMMARY & WORK REST/RATIO

SPOT WEATHER OBSERVATIONS & REQUEST								
ident Na	me:		2. Dra	inage Na	ame:		3.Date/	Time:
4. Location (T, R, S) & (Lat/Long)					5. Exp	osure / .	Aspect	
e of Inci	dent (ac	cres)		7. Fuel	Type:			
				8. Elev	ation:	Top	Во	ottom
ather Co	ondition	s at & di	aring th	e Incide	nt:			
Elev.	Place:	Wind Speed:	Wind Direc- tion:	Dry Bulb:	Wet Bulb:	RH %	Dew Point:	Sky Cond.:
scussion	a & Outl	look:						
	ather Co	dent Name:  cation (T, R, S) &  c of Incident (acceptance)  Elev. Place:	dent Name:  Pation (T, R, S) & (Lat/L)  e of Incident (acres)  ather Conditions at & du  Elev. Place: Wind	dent Name:  2. Dra  ation (T, R, S) & (Lat/Long)  e of Incident (acres)  ather Conditions at & during th  Elev. Place: Wind Speed: Direction:	dent Name:  2. Drainage Nation (T, R, S) & (Lat/Long)  2 of Incident (acres)  3 The latest ather Conditions at & during the Incide states are conditions at & during the Incide states at latest ather Conditions at & during the Incide states at latest ather Conditions at & during the Incide states at latest	dent Name:  2. Drainage Name:  ation (T, R, S) & (Lat/Long)  5. Exp  of Incident (acres)  7. Fuel Type:  8. Elevation:  Elev. Place: Wind Speed: Direction:  Bulb: Bulb: Bulb:  Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb: Bulb	dent Name:  2. Drainage Name:  ation (T, R, S) & (Lat/Long)  5. Exposure / A  or of Incident (acres)  7. Fuel Type:  8. Elevation: Top  ather Conditions at & during the Incident:  Elev. Place: Wind Speed: Direction:  Bulb: RH %  Bulb: RH %	dent Name:  2. Drainage Name:  3.Date/ 2 ation (T, R, S) & (Lat/Long)  5. Exposure / Aspect  7. Fuel Type:  8. Elevation: Top Bound

Billings Weather Zones: 128 Yellowstone Co. & North of I-90 126 Carbon Co. & South of I-90

# **Risk Management**

Maintain your situational awareness. Ensure compliance with the 10 Fire Orders and LCES. Continually monitor the 18 Situations and apply appropriate mitigation. As the incident progresses, continually reevaluate your situation. When hazards are identified mitigate them or change tactics and or strategy.

YES	NO	<b>Decision Points</b>
		Controls in place for identified hazards? If no reassess your situation
		Are selected tactics based on expected fire behavior? If no reassess your situation
		Are the current strategy & tactics working? If no reassess your situation

	Incident Risk Analysis (215a)					
Division/Group Or Segment	Hazardous Actions or Conditions	Mitigations/Warnings/Remedies				
Operational Period:						
Notes:						

<b>Incident Complexity Analysis (Type 3, 4, 5)</b>				
Fire Behavior	Yes	No		
Fuels extremely dry & susceptible to long-range spotting or you are currently experiencing extreme fire behavior.				
Weather forecast indicating no significant relief or worsening conditions.				
Current or predicted fire behavior dictates indirect control strategy with large amounts of fuel within planned perimeter.				
Firefighter Safety				
Performance of firefighting resources affected by cumulative fatigue.				
Overhead overextended mentally and/or physically.				
Communication ineffective with tactical resources or dispatch				
Organization				
Operations are at the limit of span of control.				
Incident action plans, briefings, etc. missing or poorly prepared.				
Variety of specialized operations, support personnel or equipment.				
Unable to properly staff air operations.				
Limited local resources available for initial attack.				
Heavy commitment of local resources to logistical support.				
Existing forces worked 24 hours without success.				
Resources unfamiliar with local conditions and tactics.				
Values to be Protected				
Urban interface; structures, developments, recreational areas, or potential for evacuation.				
Fire burning or threatening more than on jurisdiction & potential for unified command with different or conflicting management objectives.				
Unique natural resources, special-designation areas, critical municipal watershed, T & E species habitat, cultural value sites.				
Sensitive political concerns, media involvement, or controversial fire policy.				

If you have checked "Yes" on 3 to 5 of the analysis boxes, consider requesting the next level of incident management support.

Type 5 notes:

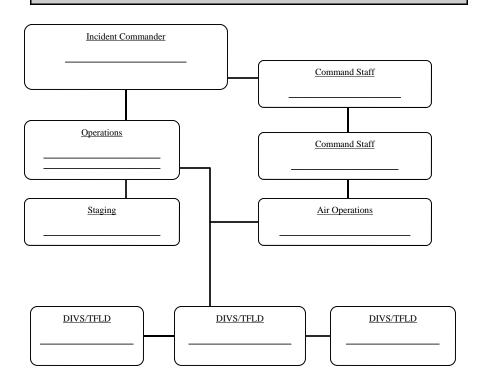
Type 4 notes:

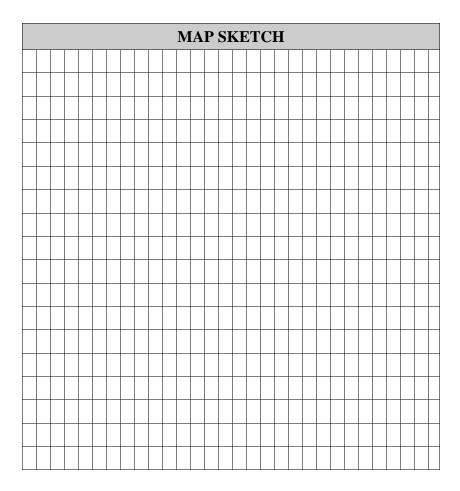
Type 3 notes:

Incident Objectives		
1. SAFETY of Firefighters & Public		
2.		
3.		
4.		
Your goal is to manage the incident and not create another.		

(Examples: Protect Structures, Keep fire east of County Rd., river or ridge.

# **INCIDENT ORGANIZATION**



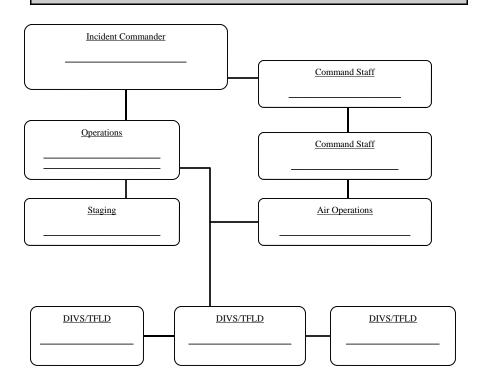


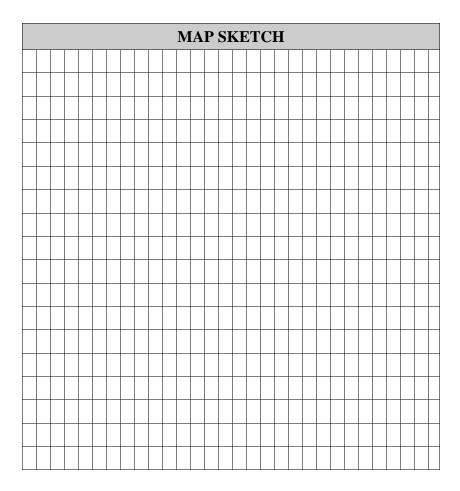
RADIO FREQUENCIES			
Net Frequency			
Command/Support	Rx: Tx:		
Tac 1	Rx: Tx:		
Tac 2	Rx: Tx:		
Air-to-Ground	Rx: Tx:		
Air-to-Air	Rx: Tx:		

Incident Objectives		
1. SAFETY of Firefighters & Public		
2.		
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# **INCIDENT ORGANIZATION**





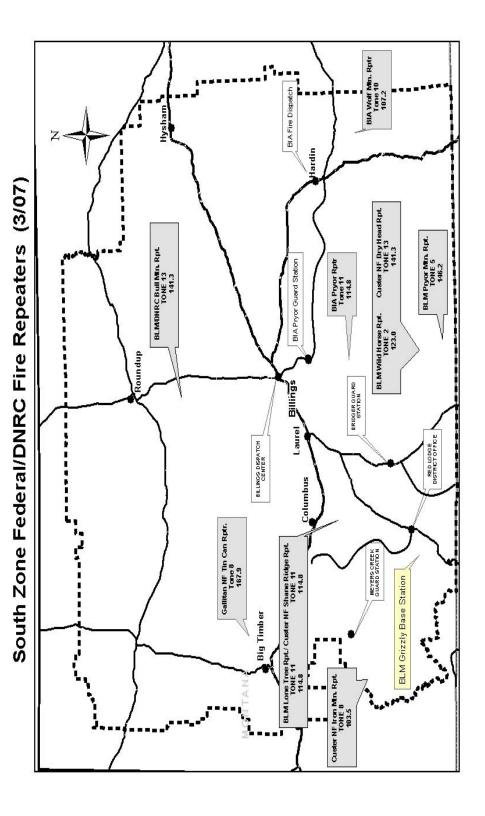
RADIO FREQUENCIES			
Net Frequency			
Command/Support	Rx: Tx:		
Tac 1	Rx: Tx:		
Tac 2	Rx: Tx:		
Air-to-Ground	Rx: Tx:		
Air-to-Air	Rx: Tx:		

ZONE CONTACT LIST					
Position	Name	Work #	Cell #		
Billings Dispatch		406-896-2900	24 hr. phone		
Billings FMO	Irv Leach	406-896-2940	406-698-2306		
Billings AFMO/ Aviation Officer	Bobby Flesch	406-896-2961	406-208-0935		
Center Manager	Mark Heppler	406-896-2901	BDC 24 hr #		
Asst. Manager	Larry Elder	406-896-2902			
E-1061 Foreman	Scottie Zemke	406-896-2929	406-671-0961		
E-1061 Asst.	Jaxson O'Brien	406-896-2884	406-697-7445		
E-1062 Foreman	Vacant				
E-1062 Asst.	Derek Yeager	406-896-2966	406-672-5182		
Tanker Base Mgr	Walt Schopfer	406-896-2963	406-861-9638		
Asst. Tanker Base	Jeremy Seng				

Field Manager	Jim Sparks	406-896-5241	406-670-9906
Asst. Field Mgr.	Vacant		
BLM LEO	Chuck Ward	406-896-5266	406-698-9854

DNRC Fire Mgr.	Daryl Kurk	406-247-4406	406-670-5422
DNRC Fire Asst.	Steve Wilkins	406-247-4405	406-861-1461
Custer N.F. FMO	Jeff Stockwell	406-446-4538	406-855-3788
Lewistown BLM	Dispatch	406-538-1072	
Miles City BLM	Dispatch	406-233-2900	
Crow BIA FMO	Dale Glenmore	406-638-2247	406-534-2325
Bridger G.S.		406-662-3634	
Billings Cache		406-896-2872	
Gallatin N.F.	Dispatch	406-587-6718	
Big Timber R.D.		406-932-5155	

AFTER ACTION REVIEW					
INCIDENT NAME:		IC:			
DATE:	INCIDENT COMPLEXITY:				
CRITIQUED BY: (Names of Attendees Below):					
What was planned?					
What actually happened?					
What was the difference,	if any?				
What can be done differen	nt next time?				
<b>AAR Leader Signature:</b>		Date:			
Reviewed By:		Date:			
COMMENTS:					



2008 Billings Zone Frequency List						
СН	CH NAME	RX	BW	TX	CG	REMARKS
1	BID RPTR	171.1625	N	166.0875	110.9 CG 1	BID RPTRS USE CG
2	CNF RPTRS	169.1755	N	164.9125	123.0 CG 2	USFS RPTRS USE CG
3	DNR RPTR	151.175	w	151.475	131.8 CG 3	SLO RPTRS USE CG
4	SOA 2	167.175	N	167.175	136.5 CG 4	BLM TAC 2
5	CNF TAC	168.350	N	168.350	146.2 CG 5	USFS TAC
6	RED	154.070	w	154.070	156.7 CG 6	MUTUAL AID
7	GOLD	153.905	w	153.905	167.9 CG 7	MUTUAL AID
8	CORAL	154.265	w	154.265	103.5 CG 8	MUTUAL AID
9	SCARLET	154.295	w	154.295	100.0 CG 9	MUTUAL AID
10	BROWN	155.820	w	155.820	107.2 CG 10	MUTUAL AID
11	MAROON	154.280	w	154.280	114.8 CG 11	MUTUAL AID
12	TRAVEL 1	163.125	N	163.125	127.3 CG 12	STRIKE TEAM TRVL.
13	TRAVEL 2	168.350	N	168.350	141.3 CG 13	STRIKE TEAM TRVL.
14	ORANGE	151.400	W	151.400	OPEN	DNR A/G SEC.
15	YELLOW	151.220	W	151.220	OPEN	ZONE A/G PRI.
16	AIR-GRND SEC	170.325	N	170.325	OPEN	FED A/G SEC.

<sup>\*\*</sup> This zone uses tone guards for repeater access, they are as follow;

**BID RPTRS (CH 1)** Bull Mountain: CG 13 Lone Tree: CG 11 Grizzly: CG 4

Wildhorse: **CG 2** Pryor: CG 5

CUSTER N.F (CH 2)

DNRC-SLO (CH 3) Shane Ridge: CG 11 Bull MTN: CG 13

Dry Head: CG 13 Iron Mtn: CG 8

Billings Dispatch is available on all three nets.

- Identify the channel name when calling on repeaters.
- Local Suppression Supervisors may switch to local groups, but all tactical traffic takes place on the "Colored" Mutual Aid channels.
- Use Repeaters in place of simplex channels when talking to dispatch.
- Repeater locations can be referenced on the map, on the following page.

Notes

2008 Fire Crew Days Off Schedule								
Position	Name	Sun	Mon	Tues	Wed	Thur	Fri	Sat
ENGB 1061	Scott Zemke							
ENOP 1061	Jaxson O'Brien							
FFTI	Steve Gutenkauf							
FFTI	Bryon Grotjohn							
FFT2								
FFT2								
ENGB 1062	Vacant							
ENOP 1062	Derek Yeager							
FFTI								
FFTI								
FFT2								
FFT2								
				1		1		
FMO	Irv Leach							
AFMO	Bobby Flesch							
Tanker Base	Walt Schopfer							
Tanker Base	Jeremy Seng							
Seat MGR	Mark Verlanic							
	Cr	ew Pho	ne Nur	nbers				

#### BEARTOOTH ERC CARD DEFINITION

#### Fire Danger Area:

- South East Montana
- FC Zone 126 Carbon County
- Timbercrest W.S. 245607
   Meets NWCG Wx Station Standards



# Fire Danger Interpretation:



EXTREME -- Use extreme caution

(Caution) -- Watch for change

Moderate -- Lower Potential, but always be aware

Maximum -- Highest Energy Release Component by day for 1970 - 2005

Average -- shows peak fire season over 36 years (5339 observations)

90th Percentile -- Only 10% of the 5339 days from 1970 - 2005

had an Energy Release Component above 57

#### Local Thresholds - Watch out: Combinations

of any of these factors can greatly increase fire behavior: 20' Wind Speed over 20 mph, RH less than 20%, Temperature over 90, 1000-Hour Fuel Moisture less than 12

# Remember what Fire Danger tells you:

- Energy Release Component gives seasonal trends calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.
- ♥Wind is NOT part of ERC calculation.
- Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.
- ✓ Listen to weather forecasts -- especially WIND.

# Past Experience:

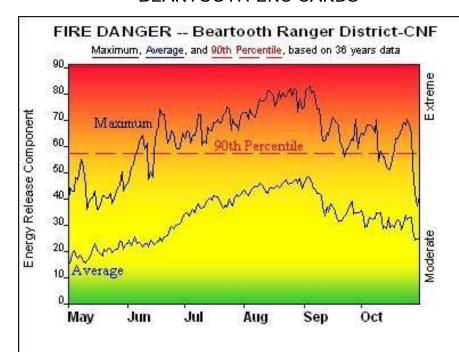
- 1. Energy Release Component (ERC) indicates fire season severity and trends in fire seasons. It represents that heat released by fire indicates potential for large fire spread.
- 2. Fuel Model G Short Needle Conifer with Heavy Dead Fuels (FM 10)
- 3. Both the Willie fire (1500 ac., August 27th) and Shepard Mtn. (10000 ac, August 25th) fires were stand replacement fires driven by strong down canyon winds. The Red Waffle (6000 ac., July 14th) fire was wind driven by a frontal passage. The Parkside fire was early in the year (8000 feet, July 17th) on a SE aspect and driven by steep slopes.
- 4. Current weather forecast information for Eastern Montana may be viewed at:

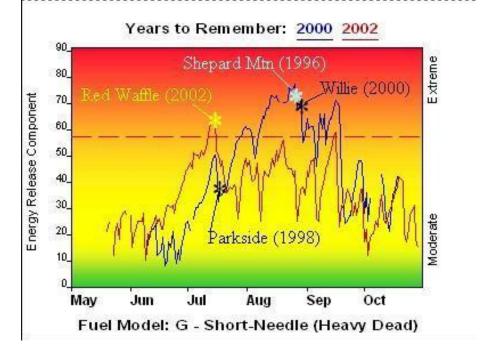
www.wrh.noaa.gov/byz/. Responsible Agency: USFS

FF+3.0.5 05/16/2006-10:37 (C:\foragps\fsprod\fam\Fire Family Plus\FFPLUS3.mdb)

Design by NWCG Fire Danger Working Team

# **BEARTOOTH ERC CARDS**





#### EASTERN MT BI CARD DEFINITION

### Fire Danger Area:

- BMFZ (All FDRA's)
- Fire Wx Zone 121,130-133
- BMFZ-RAW/S

# Fire Danger Interpretation:



EXTREME -- Use extreme caution

(Caution) -- Watch for change

Moderate -- Lower Potential, but always be aware

Maximum -- Highest Burning Index by day

for 1986 - 2005

Average -- shows peak fire season

80th Percentile -- Only 20% of the days from 1986 - 2005

had an Burning Index above 34

#### Local Thresholds - Watch out: Combinations

of any of these factors can greatly increase fire behavior:

20' Wind Speed over 15 mph, RH less than 20%,

Temperature over 85, 1000-Hour Fuel Moisture less than 11

# Remember what Fire Danger tells you:

✓ Burning Index gives day-to-day fluctuations

calculated from 2 pm temperature, humidity, wind,

daily temperature & rh ranges, and precip duration.

√Wind is part of BI calculation.

√Watch local conditions and variations across

the landscape -- Fuel, Weather, Topography.

Listen to weather forecasts -- especially WIND.

# Past Experience:

Long term drought continues as we enter the fire season.

Trigger points to be aware of: Temperatures above 85 degrees, RH below 20, sustained 20' windspeeds that exceed 15 mph.

Extreme fire behavior should be anticipated as BI's approach 35 for the zone.

Listen for Red Flag Warning and Fire Weather Watches. Wind can be a critical factor in Eastern Montana fire growth, particularly in combination with low RH and high temperatures.

Size of fires represented:

Missouri Breaks-125,900 acres,

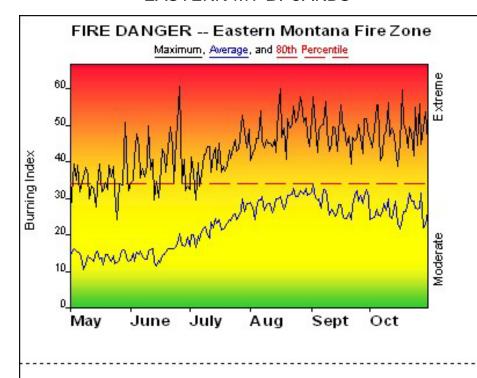
Brewer Fire-58,300 acres,

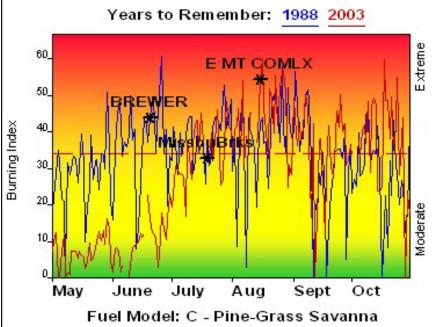
Eastern Montana Complex -13,533 acres

Developed by NWCG-Fire Danger Working Team

FF+3.0.4 06/14/2006-10:06

#### EASTERN MT BI CARDS





NOTES

Restaurants, Hotels, and Automotive Repair

Restaurants, Hotels, and Automotive Repair						
Food						
Applebee's	204 Main St	896-8450				
Blue's BBQ	523 Hilltop Rd.	245-2583				
Denny's	501 N. 27 <sup>th</sup>	256-7735				
Fuddruckers	875 Main St	259-2489				
Gigglin' Grizzly	416 Lake Elmo	252-8646				
Guadalajara	1403 Main St.	245-2151				
Mackenzie River	405 Main St.	254-0066				
Mongolian Grill	1327 Main St.	256-5951				
Perkin's	825 N 27 <sup>th</sup>	248-8320				
Subway	251 Main St	254-1300				
Subway	848 Main St	256-9602				
	Hotels					
Boot Hill Inn	242 E. Airport Rd	245-2000				
Comfort Inn	2030 Overland Ave	652-5200				
Country Inn & Suites	231 Main St	245-9995				
Crown Plaza (Sheraton)	27 N 27 <sup>th</sup>	252-7400				
Days Inn	843 Parkway Ln.	252-4007				
Heights Inn	1206 Main St.	252-8451				
Juniper Inn	1315 N 27 <sup>th</sup>	245-4128				
Rimrock Inn	1203 N 27 <sup>th</sup>	252-7107				
Rimview Inn	1025 N 27 <sup>th</sup>	248-2622				
Travelwest Lodge	3311 2 <sup>nd</sup> Ave N	245-6345				
Twin Cubs	1818 Main St.	252-9851				
	Automotive					
Archie Cochrane Ford	2133 King Ave. W	656-1104				
Frontier Chevy	3000 King Ave. W	896-3100				
G&J Diesel	1739 Main St	248-6366				
I-State Truck Center (Freightliner)	4600 South Frontage Rd.	252-5121				
Lithia Dodge	2229 King Ave. W	652-2200				
Motor Power (International)	4941 Midland Rd.	252-5651				
Rimrock Auto (GMC/ Chevy Me- dium Duty Trucks)	5370 Holiday Ave.	655-8566				